

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-24. (Cancelled)

25. (Currently Amended) An information providing apparatus for supplying motion data, ~~stating the movements of a body unit of a robot apparatus,~~ or an application program, ~~managing recognition and/or action control,~~ to a robot apparatus~~[[,]]~~ over a network~~;~~ ~~said apparatus~~ comprising:

content storage means ~~having stored~~ for storing data or programs to be supplied to the robot apparatus;

receiving means for receiving an inquiry, ~~pertinent to~~ comprising a service request and ~~the information pertinent to~~ of the robot apparatus~~[[,]]~~ from the robot apparatus;

~~analyzing means for analyzing said inquiry;~~

preparing means for preparing a list of data or programs based on services requested in the service request and the information of the robot apparatus and for returning the list to the robot apparatus;

receiving means for receiving a selection of data or programs from the list from the robot apparatus; and

transmitting means for transmitting the selected data or programs, ~~matched to services requested,~~ to said the robot apparatus.

26. (Currently Amended) The information providing apparatus according to claim 25, wherein the information providing apparatus communicates with the robot apparatus in accordance with a SOAP (Simple Object Access Protocol [[:]]).

27. (Currently Amended) The information providing apparatus according to claim 25, further comprising:

a database for supervising the supplementary information pertinent to the data or programs stored in said the content storage means; and

means for ~~taking the matching between said~~ the inquiry and the supplementary information of ~~said database, for preparing a list of data or programs that may be provided, and for returning said list to the robot apparatus.~~

28. (Currently Amended) The information providing apparatus according to claim 27, further comprising:

means for returning, ~~responsive to the results of~~ in response to the selection from ~~said robot apparatus for said~~ the list of the data or programs that ~~can be provided, [[a]]~~ an access method for accessing the selected data or programs ~~selected to the robot apparatus. [[:]]~~

said wherein the transmitting means transmitting transmits the selected data or programs, ~~as requested, responsive~~ in response to an access request, ~~matched to said~~ corresponding to the accessing method, from said the robot apparatus.

29. (Currently Amended) The information providing apparatus according to claim 27, wherein ~~said~~ the supplementary information ~~pertinent to said data or programs includes~~ comprises ~~the~~ information pertinent to services and the information pertinent to information of the robot apparatus.

30. (Currently Amended) The information providing apparatus according to claim 25 ~~or 29~~, wherein ~~said~~ the information ~~pertinent to~~ of the robot apparatus ~~includes~~ comprises at least ~~a part of one~~ the following information:

(1) an ID ~~proper to a~~ of the robot apparatus, ~~uniquely allocated~~ wherein the ID is unique to each the robot apparatus;

(2) a robot sort ID ~~uniquely allocated~~, wherein the sort ID is unique to each ~~of the sorts~~ a type of the robot apparatus;

(3) a list of functions of the robot apparatus;

(4) ~~the~~ information indicating ~~the~~ hardware architecture of the robot apparatus; and

(5) a database list owned by the robot apparatus.

31. (Currently Amended) An information providing apparatus for providing data or a program to a robot apparatus, over a network₁; ~~said apparatus~~ comprising:

content storage means ~~having stored~~ for storing data or programs to be supplied to the robot apparatus;

receiving means for receiving an inquiry, ~~pertinent to~~ comprising a service request and ~~the information pertinent to the robot apparatus~~ [[,]] from the robot apparatus;

~~analyzing means for analyzing said inquiry;~~ and

preparing means for preparing a list of data or programs based on services requested in the service request and the information of the robot apparatus and for returning the list to the robot apparatus;

receiving means for receiving a selection of data or programs from the list from the robot apparatus,

~~transmitting means for transmitting data or programs, matched to services requested, to said robot apparatus said~~ wherein the ~~information pertinent to of the robot apparatus at least including~~ comprises ~~a list of functions of said the robot apparatus, said apparatus further comprising;~~

means for specifying ~~the~~ needed functions ~~needed for said the~~ robot apparatus to render the services requested; and

means for comparing the needed functions ~~specified by said function~~ ~~specifying means to said the~~ list of functions ~~of the robot apparatus for specifying the~~ to determine functions in deficit in ~~said the~~ robot apparatus, among ~~said the~~ needed functions;

means for retrieving one or more objects of functional objects
corresponding to the functions in deficit, from an object storage means for storing
functional objects utilized by the robot apparatus; and

said transmitting means for transmitting the objects and the selected data
or programs ~~for substituting the functions usable by said~~ to the robot apparatus
~~for said functions in deficit.~~

32. (Currently Amended) The information providing apparatus according
to claim 25, wherein the information ~~pertinent to said~~ of the robot apparatus
~~includes at least~~ comprises a list of functions of the robot apparatus, and

~~said wherein the~~ information providing apparatus further ~~comprising~~
comprises:

object storage means for storage of functional objects utilized by ~~said the~~
robot apparatus;

means for specifying ~~the~~ needed functions ~~needed for said the~~ robot
apparatus to render the services requested;

means for comparing the needed functions ~~specified by said function-~~
~~specifying means to said the~~ list of functions of the robot apparatus ~~for specifying~~
~~the to determine~~ functions in deficit in ~~said the~~ robot apparatus~~[[,]]~~ among said
the needed functions; and

retrieving means for retrieving ~~an object~~ one or more objects of functional
objects, matched to said corresponding to the function functions in deficit, from
said the object storage means; ~~said,~~

~~wherein the transmitting means transmitting said object of the function in-~~
~~deficit~~ transmits the objects, along with the selected data or programs ~~matched to~~
~~the requested services~~, to said the robot apparatus.

33. (Currently Amended) An information providing method for supplying motion data, stating the movements of a body unit of a robot apparatus, or an application program, managing recognition and/or action control, to a robot apparatus, over a network₁; ~~said~~ the method comprising:

~~a receiving step of receiving, from said the robot apparatus [[,]] an inquiry containing the information pertinent to~~ comprising a service request and the information ~~pertinent to~~ of said the robot apparatus;

~~an analysis step of analyzing said inquiry;~~

formulating a list of data or programs that may be provided to the robot apparatus based on services requested in the service request and the information of the robot apparatus;

returning the list to the robot apparatus;

receiving a selection of data or programs from the list from the robot apparatus; and

~~a transmitting step of transmitting the selected data or program programs,~~
~~matched to services requested~~, to said the robot apparatus.

34. (Currently Amended) The information providing method according to claim 33, wherein communication with the robot apparatus is by ~~SOAP~~ (Simple Object Access Protocol [[:]]).

35. (Currently Amended) The information providing method according to claim 33, further comprising:

~~a step of supervising the supplementary information pertinent to each data or program as a database; and~~

~~a step of taking the matching of said the inquiry and the supplementary information of said database,~~

~~wherein the formulating [[a]] of the list of the data or programs that can be provided is based on the matching of the inquiry and the supplementary information, and~~

~~returning the list to the robot apparatus.~~

36. (Currently Amended) The information providing method according to claim 35, further comprising:

~~a step of returning, responsive to the results of in response to the selection from said robot apparatus for said the list of the data or programs that can be provided, [[a]] an access method for accessing the selected data or programs selected to the robot apparatus, [[:]]~~

~~said wherein transmitting step the selected data comprises transmitting the data or the program as requested, responsive to the in response to an~~

access request complying with ~~said~~ the access method from ~~said~~ the robot apparatus.

37. (Currently Amended) The information providing method according to claim 35, wherein ~~said~~ the supplementary information ~~pertinent to said data or programs includes the~~ comprises information pertinent to services and the information pertinent to information of the robot apparatus.

38. (Currently Amended) The information providing method according to claim 33 ~~or 37~~, wherein ~~said~~ the information ~~pertinent to~~ of the robot apparatus ~~includes~~ comprises at least ~~a part of one~~ the following information:

(1) an ID ~~proper to a~~ of the robot apparatus, ~~uniquely allocated wherein~~ the ID is unique to each the robot apparatus;

(2) a robot sort ID ~~uniquely allocated, wherein the sort ID is unique to each~~ of the sorts a type of the robot apparatus;

(3) a list of functions of the robot apparatus;

(4) ~~the~~ information indicating ~~the~~ hardware architecture of the robot apparatus; and

(5) a database list owned by the robot apparatus.

39. (Currently Amended) An information providing method for providing data or a program to a robot apparatus, over a network, ~~said~~ the method comprising:

~~a receiving step of receiving, from said the robot apparatus, an inquiry containing the information pertinent to comprising a service request and the information pertinent to of said the robot apparatus;~~

~~an analysis step of analyzing said inquiry;~~

~~formulating a list of data or programs that may be provided to the robot apparatus based on services requested in the service request and the information of the robot apparatus;~~

~~returning the list to the robot apparatus;~~

~~receiving a selection of data or programs from the list from the robot apparatus; and~~

~~a transmitting step of transmitting the data or programs, matched to services requested, to said robot apparatus;~~

~~said wherein the information pertinent to of the robot apparatus including at least comprises a list of functions of the robot apparatus;[[,]]~~

~~said information providing method further comprising:~~

~~a step of specifying the needed functions needed for said the robot apparatus to render the services requested; and~~

~~a step of comparing the needed functions specified by said function specifying means to said the list of functions of the robot apparatus for specifying the to determine functions in deficit in said the robot apparatus, among said the needed functions;~~

retrieving one or more objects of functional objects corresponding to the deficit functions, from an object storage means for storing functional objects utilized by the robot apparatus; and

~~said transmitting step transmitting the objects and the selected data or programs, for substituting the functions usable by said to the robot apparatus for the functions in deficit.~~

40. (Currently Amended) The information providing method according to claim 33, wherein the information ~~pertinent to~~ of said the robot apparatus ~~includes at least comprises~~ a list of functions of the robot apparatus, and

~~said the~~ information providing method further comprising:

~~a step of specifying the needed functions needed for said the~~ robot apparatus to render the services requested;

~~a step of comparing the needed functions as specified by said needed-function specifying step to said the~~ list of functions of the robot apparatus for ~~specifying the to determine~~ functions in deficit in ~~said the~~ robot apparatus, among ~~said the~~ needed functions; and

~~a retrieving step of retrieving an object of the function in deficit one or more objects of functional objects corresponding, matched to said function the functions in deficit, from an object storage means having stored therein for storing functional objects utilized by said the robot apparatus; and~~

~~said transmitting step~~ transmitting ~~said object of the function in deficit~~ the
objects, along with the selected data or programs ~~matched to the requested~~
services, to ~~said~~ the robot apparatus.

41. (Currently Amended) An information providing system ~~including~~
comprising a robot apparatus and an information providing apparatus for
supplying motion data, stating the movements of a body unit of ~~said~~ the robot
apparatus, or an application program, managing recognition and/or action
control, to ~~[[a]]~~ the robot apparatus~~[[,]]~~ over a network~~[[;]]~~, ~~said wherein the~~
information providing apparatus comprises ~~comprising~~:

content storage means ~~having stored~~ for storing data or programs to be
supplied to the robot apparatus;

receiving means for receiving an inquiry, ~~pertinent to~~ comprising a service
request and ~~the information pertinent to~~ of the robot apparatus, from the robot
apparatus;

~~analyzing means for analyzing said inquiry;~~

means for preparing a list of data or programs based on services
requested in the service request and the information of the robot apparatus and
for returning the list to the robot apparatus;

means for receiving a selection of data or programs from the list from the
robot apparatus; and

transmitting means for transmitting the selected data or programs,
~~matched to services requested,~~ to ~~said~~ the robot apparatus.

42. (Currently Amended) The information providing ~~method~~ system according to claim 41, wherein the ~~method~~ information providing apparatus communicates with the robot apparatus in accordance with a ~~SOAP~~ (Simple Object Access Protocol [()]).

43. (Currently Amended) The information providing ~~method~~ system according to claim 41, wherein the information providing apparatus further ~~comprising~~ comprises:

a database for supervising [[the]] supplementary information pertinent to the data or programs stored in ~~said~~ the content storage means; and

~~means of taking the~~ for matching between said the inquiry and the supplementary information of ~~said database, for preparing a list of data or programs that may be provided, and for returning said list to the robot apparatus.~~

44. (Currently Amended) The information providing system according to claim 41, wherein the information providing apparatus further ~~comprising~~ comprises:

~~means for returning, responsive to the results of~~ in response to the selection from ~~said robot apparatus for said~~ the list of the ~~data or programs that can be provided, [[a]]~~ an access method for accessing the selected data or programs ~~selected~~ to the robot apparatus;

~~said wherein the transmitting means transmitting transmits the selected~~
data or programs, ~~as requested, responsive in response~~ to an access request,
~~matched to said corresponding to the~~ accessing method, from ~~said the~~ robot
apparatus.

45. (Currently Amended) The information providing ~~method~~ system
according to claim 43, wherein ~~said the~~ supplementary information ~~pertinent to~~
~~said data or programs includes~~ comprises the information pertinent to services
and information pertinent to information of the robot apparatus.

46. (Currently Amended) The information providing system according to
claim 41 ~~or 45~~, wherein ~~said the~~ information ~~pertinent to of~~ the robot apparatus
~~includes~~ comprises at least a part of one the following information:

(1) an ID ~~proper to a~~ of the robot apparatus, ~~uniquely allocated wherein~~
the ID is unique to each the robot apparatus;

(2) a robot sort ID ~~uniquely allocated, wherein the sort ID is unique to each~~
~~of the sorts~~ a type of the robot apparatus;

(3) a list of functions of the robot apparatus;

(4) ~~the~~ information indicating ~~the~~ hardware architecture of the robot
apparatus; and

(5) a database list owned by the robot apparatus.

47. (Currently Amended) The information providing system according to claim 41, wherein ~~said~~ the information ~~pertinent to~~ of the robot apparatus ~~includes at least~~ comprises a list of functions of the robot apparatus, and ~~said~~ wherein the information providing apparatus further ~~comprising~~ comprises:

means for specifying ~~the~~ needed functions ~~needed for said the~~ robot apparatus to render the services requested; and

means for comparing the needed functions ~~specified by said function-~~ specifying means to said the list of functions of the robot apparatus for specifying ~~the to determine~~ functions in deficit in ~~said the~~ robot apparatus, among ~~said the~~ needed functions; and

means for retrieving one or more objects of functional objects corresponding to the deficit functions, from an object storage means for storing functional objects utilized by the robot apparatus,

~~said~~ wherein the transmitting means ~~transmitting~~ transmits the objects and the selected data or programs for substituting the functions usable by said to the robot apparatus ~~for said functions in deficit.~~

48. (Currently Amended) The information providing system according to claim 41, wherein the information ~~pertinent to~~ of ~~said~~ the robot apparatus ~~includes at least~~ comprises a list of functions of the robot apparatus, and ~~said~~ wherein the information providing apparatus further ~~comprising~~ comprises:

object storage means ~~having stored therein the~~ for storing functional objects utilized by ~~said the~~ robot apparatus;

means for specifying ~~[[the]]~~ needed functions ~~needed~~ for ~~said the~~ robot apparatus to render services;

means for comparing the needed functions ~~specified by said function-~~
~~specifying means to said the~~ list of functions of the robot apparatus for specifying
the to determine functions in deficit in ~~said the~~ robot apparatus, among ~~said the~~
needed functions; and

retrieving means for retrieving ~~an object of the function in deficit~~ one or
more objects of the functional objects corresponding , ~~matched to said function~~
the functions in deficit , from ~~said the~~ object storage means;

~~said wherein the~~ transmitting means transmits ~~said object of~~
~~the function in deficit~~ the objects, along with the selected data or programs
~~matched to the requested services~~, to ~~said the~~ robot apparatus.